

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application.

LISTING OF CLAIMS:

1. (Currently Amended) A device for producing a gas cushion for supporting a preheated glass sheet, comprising a chamber connected to a source of compressed gas, the chamber including an upper wall having an external surface dimensioned to the outline of the glass sheet and having a plurality of apertures for the passage of gas, wherein the apertures are designed as nozzles, each having an entry bore as well as a progressively widening exit hole and each being in fluid communication with the source of compressed gas so that the compressed gas passes first through the entry bore and then through the exit hole to produce the gas cushion which supports the preheated glass sheet above the external surface of the upper wall of the chamber, and that the external surface of the upper wall of the chamber has a greater degree of perforation (sum of exit areas of the exit holes in relation to total area) in edge zones of the external surface of the upper wall than in a central zone of the external surface of the upper wall which is completely surrounded by the edge zones.

2. (Previously Presented) The device according to claim 1, wherein the central zone roughly corresponds in the magnitude of its area to the sum of the edge zones.

3. (Previously Presented) The device according to claim 1, wherein the ratio of the degree of perforation in the central zone to the degree of perforation in the edge zones amounts to approx. 0.5 to 0.9.

4. (Previously Presented) The device according to claim 1, wherein the external surface of the upper wall of the chamber has a degree of perforation of at most approx. 0.3 in its central zone.

5. (Previously Presented) The device according to claim 1, wherein the external surface of the upper wall of the chamber has a greater degree of perforation in the edge zones of its longer sides than in the edge zones of its shorter sides.

6. (Previously Presented) The device according to claim 1, wherein the degree of perforation of the external surface of the upper wall of the chamber diminishes from a feed side for the glass sheet to a side of the surface opposite the feed side.

7. (Previously Presented) The device according to claim 1, wherein the entry bore of at least one of the nozzles widens at least once abruptly in a direction of flow of the compressed gas.

8. (Previously Presented) The device according to claim 7, wherein the entry bore of the nozzles has a first section with a diameter of approx. 2 to 4 mm, as

well as a second section with a diameter of approx. 20 mm, whereby the exit hole follows on from the second section.

9. (Previously Presented) The device according to claim 8, wherein the entry bore of the nozzles has a third section with a diameter of approx. 10 mm between the first and second section.

10. (Previously Presented) The device according to claim 9, wherein at least the first, the second and the third section are formed cylindrically.

11. (Previously Presented) The device according to claim 1, wherein the external surface of the upper wall of the chamber is covered by a thin porous cloth made of heat-resistant material.

12. (Previously Presented) The device according to claim 11, wherein the cloth is made of heat-conductive material.

13. (Previously Presented) The device according to claim 1, wherein the chamber is made of ceramic material.

14. (Previously Presented) The device according to claim 13, wherein the chamber is designed as a one-piece moulding.

15. (Previously Presented) The device according to claim 1, wherein the chamber is provided with heating elements.

16. (Previously Presented) The device according to claim 3, wherein the ratio of the degree of perforation in the central zone to the degree of perforation in the edge zones amounts to approx. 0.7 – 0.8.

17. (Previously Presented) The device according to claim 4, wherein the external surface of the upper wall of the chamber has a degree of perforation of at most approx. 0.25 in its central zone.

18. (Previously Presented) The device according to claim 8, wherein the first section has a diameter of approx. 3 mm.

19. (Previously Presented) The device according to claim 10, wherein at least the first, the second and the third section are formed with a coinciding cylinder axis.

20. (Previously Presented) The device according to claim 12, wherein the cloth is made of corrosion-resistant steel (stainless steel).

21. (New) A device positioned between a preheating furnace which produces a preheated glass and a Lehr, for producing a gas cushion to support the preheated glass sheet exiting the preheating furnace, the device comprising a

chamber connected to a source of compressed gas, the chamber including an upper wall having an external surface, the upper wall of the chamber possessing a plurality of apertures in fluid communication with the source of compressed gas, the apertures forming nozzles each having an entry bore as well as a progressively widening exit hole so that the compressed gas from the source of compressed gas passes first through the entry bore and then through the exit hole to produce the gas cushion supporting the glass sheet above the external surface of the upper wall at a position between a ring mould and a vacuum mould, and that the external surface of the upper wall of the chamber has a greater degree of perforation (sum of exit areas of the exit holes in relation to total area) in edge zones of the external surface of the upper wall than in a central zone of the external surface of the upper wall which is completely surrounded by the edge zones.

22. (New) A method of processing a glass sheet comprising:

preheating the glass sheet to produce a preheated glass sheet;

advancing the preheated glass sheet toward a bending station comprised of a chamber possessing an upper wall having an external surface dimensioned to an outline of the preheated glass sheet, the upper wall of the chamber possessing a plurality of apertures in fluid communication with a source of compressed gas, the apertures forming nozzles each having an entry bore as well as a progressively widening exit hole, the external surface of the upper wall of the chamber having a greater degree of perforation (sum of exit areas of the exit holes in relation to total area) in edge zones of the external surface of the upper wall than in a central zone of

the external surface of the upper wall which is completely surrounded by the edge zones;

supporting the preheated glass sheet on a gas cushion in the bending station, the gas cushion being produced by first passing the compressed gas from the source of compressed gas through the entry bore of the nozzles and then through the exit hole of the nozzles, the preheated glass sheet being supported on the gas cushion in the bending station so that the preheated glass sheet is supported above the external surface of the upper wall at a position between a ring mould and a vacuum mould in the bending station;

placing the preheated glass sheet on the ring mould, and moving the vacuum mould into engagement with the preheated glass sheet to bring the preheated glass sheet into a desired shape; and

transporting the preheated glass sheet out of the bending station.